IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of coding an audio signal, the method comprising the acts of:

generating a monaural signal,

analyzing the spatial characteristics of at least two audio channels to obtain one or more sets of spatial parameters for successive time slots,

responsive to said monaural signal containing a transient at a given transient time, determining a non-uniform time segmentation of said sets of spatial parameters for a period including said transient time,

determining a relevance of said transient by looking at a difference between first estimated spatial parameters derived from a first window that surrounds a transient location of said

transient and second estimated spatial parameters derived from a

second window around said transient location, the second window

being shorter than the first window; and

    generating an encoded signal comprising the monaural signal

and the one or more sets of spatial parameters; and

    if said difference is larger than a threshold, then inserting

in the encoded signal additional parameters estimated around said

transient location.

    2.(Currently Amended) A The method according to claim 1

wherein said monaural signal comprises a combination of at least

two input audio channels.

    3.(Currently Amended) A The method according to claim 1

wherein said monaural signal is generated with a parametric

sinusoidal coder, said coder generating frames corresponding to

successive time slots of said monaural signal, at least some of

said frames including parameters representing a transient occurring

in the respective time slots represented by said frames.

4. (Currently Amended) A–The method according to claim 1 wherein said monaural signal is generated with a waveform encoder, said coder determining a non-uniform time segmentation of said monaural signal for a period including said transient time.

5. (Currently Amended) A–The method according to claim 4 wherein said waveform encoder is a–an mp3 encoder.

6. (Currently Amended) A–The method according to claim 1 wherein said sets of spatial parameters include at least two localization cues.

7. (Currently Amended) A–The method according to claim 6 wherein said sets of spatial parameters further comprises a parameter that describes a similarity or dissimilarity of waveforms that cannot be accounted for by the localization cues.

8. (Currently Amended) A–The method according to claim 7 wherein the parameter is a maximum of a cross-correlation function.

9.(Currently Amended) An encoder for coding an audio signal, the encoder comprising:

means for generating a monaural signal,

means for analyzing the spatial characteristics of at least two audio channels to obtain one or more sets of spatial parameters for successive time slots,

means, responsive to said monaural signal containing a transient at a given transient time, for determining a non-uniform time segmentation of said sets of spatial parameters for a period including said transient time, and

means for determining a relevance of said transient by looking at a difference between first estimated spatial parameters derived from a first window that surrounds a transient location of said transient and second estimated spatial parameters derived from a second window around said transient location, the second window being shorter than the first window;

means for generating an encoded signal comprising the monaural signal and the one or more sets of spatial parameters; and

means for inserting in the encoded signal additional parameters estimated around said transient location if said

difference is larger than a threshold.

10.(Original) An apparatus for supplying an audio signal, the apparatus comprising:

an input for receiving an audio signal,

an encoder as claimed in claim 9 for encoding the audio signal to obtain an encoded audio signal, and

an output for supplying the encoded audio signal.

Claim 11 (Canceled)

12.(Currently Amended) A storage medium on which an encoded signal as claimed in claim 11 has been stored, the signal comprising:

a monaural signal containing at least one indication of a transient occurring at a given time in said monaural signal; and

one or more sets of spatial parameters for successive time slots of said signal, said sets of spatial parameters providing a non-uniform time segmentation of audio signal for a period including said transient time;

wherein the one or more sets of spatial parameters is

indicative of a difference being larger than a threshold, the

difference being between first estimated spatial parameters derived

from a first window that surrounds a transient location of said

transient and second estimated spatial parameters derived from a

second window around said transient location, the second window

being shorter than the first window.

13. (Currently Amended)   A method of decoding an encoded audio

signal, the method comprising:

obtaining a monaural signal from the encoded audio signal,

obtaining one or more sets of spatial parameters from the

encoded audio signal, and

responsive to said monaural signal containing a transient at a

given time, determining a non-uniform time segmentation of said

sets of spatial parameters for a period including said transient

time, and

applying the one or more sets of spatial parameters to the

monaural signal to generate a multi-channel output signal,

wherein the one or more sets of spatial parameters is

indicative of a difference being larger than a threshold, the

difference being between first estimated spatial parameters derived

from a first window that surrounds a transient location of said

transient and second estimated spatial parameters derived from a

second window around said transient location, the second window

being shorter than the first window.

14. (Currently Amended) A decoder for decoding an encoded

audio signal

means for obtaining a monaural signal from the encoded audio

signal,

means for obtaining one or more sets of spatial parameters

from the encoded audio signal, and

means, responsive to said monaural signal containing a

transient at a given time, for determining a non-uniform time

segmentation of said sets of spatial parameters for a period

including said transient time, and

means for applying the one or more sets of spatial parameters

to the monaural signal to generate a multi-channel output signal,

wherein the one or more sets of spatial parameters is

indicative of a difference being larger than a threshold, the

difference being between first estimated spatial parameters derived

from a first window that surrounds a transient location of said

transient and second estimated spatial parameters derived from a

second window around said transient location, the second window

being shorter than the first window.

15. (Original)   An apparatus for supplying a decoded audio

signal, the apparatus comprising:

an input for receiving an encoded audio signal,

a decoder as claimed in claim 14 for decoding the encoded

audio signal to obtain a multi-channel output signal,

an output for supplying or reproducing the multi-channel

output signal.

16. (New)   The method of claim 1, wherein the additional

parameters are inserted in an additional frame representing the

second window around the transient location.

17. (New)   The method of claim 1, further comprising the act of

including in the encoded signal an indication that the transient

location is not selected for use in a spatial representation ff the

difference is below the threshold.

18. (New) The method of claim 1, wherein the transient is a

first transient in a frame containing a plurality of transients.